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Farm Mobilization **FACT SHEET**

Plant Cover Crops to Protect Land - Increase Productivity

If the Nation's farmers are to produce the increasing quantities of food and fiber that will be needed in 1953 and future years, more attention must be given to crops and methods which protect and improve the tillable farm land. Growing cover crops is one of the most effective ways the farmer has of protecting and improving his land.

Much farm land is subject to serious erosion and loss of plant food -- particularly in the higher rainfall areas -- if not protected by cover crops between harvesting one crop and planting the next. Cover crops also may furnish additional feed for livestock. However, cover crops should be grazed only as recommended for the variety and area if they are to fulfill the primary objective of protecting and improving farm land.

Increasing the use of cover crops is ideally suited to local activity in that a program to be effective must be based on local rainfall, temperature, length of growing season, soil, altitude, and farming systems. This fact sheet contains information on cover crops, the availability of some varieties of seeds, and suggestions to Agricultural Mobilization Committees and others for increasing the use of cover crops.

COVER CROPS NEEDED IN MOST AREAS

Cover crops have a place in farming systems wherever tilled crops are grown consecutively and where there is enough rainfall.

In the South, most cash crops come off the ground early enough to allow establishment of cover crops before freezing weather. Farther north, cover crops logically follow cash crops which are harvested early in the fall -- such as sweet corn, early potatoes, and tobacco. Cover crops protect the ground from the time one cash crop is harvested until another is planted.

Even where the soil remains frozen or covered with snow during the winter, unprotected soil often is seriously damaged when the snow and ice melt. Cover crops prevent this. In spring-planted grain areas of limited rainfall, grain stubble and weeds help to protect the land. In fall-sown grain areas, the growing grain itself helps protect the land in winter.

The use of cover crops is increasing, particularly in the South. There unprotected land suffers most when left exposed between crops or during the winter months. Less than half of such land is planted to winter cover crops. North and west of this area, cover crops are still less common.

SMALL GRAINS AND LEGUMES USED FOR COVER CROPS

Small grains -- rye, oats, and wheat -- are widely used as cover crops in areas where these crops can be planted in the fall. They are important protective crops even when harvested for grain, but their protective value is greater when they are worked into the soil. They have an advantage in that seed is usually plentiful, generally available, and relatively low in cost. They have a further advantage in that farmers generally have the knowledge and equipment for producing such crops. Grains often are the means of encouraging farmers to start with cover crops and to get more effective cover crop varieties into the farming system.

For increasing soil fertility and obtaining greater production, more attention should be given to such legumes as adapted varieties of vetches, lupines, clovers, and winter peas. Such crops add nitrogen at the same time they protect the soil. Mixtures of legumes and small grains also make good cover crops.

COVER CROPPING REQUIRES LOCAL PLANNING

Because the adaptation of cover crops varies so widely, an effective program must be based on local conditions. These are a few questions which can be answered best by State or local sources that are of vital importance to the farmer who is considering planting cover crops:

What varieties are best for local use?

Can seed be obtained locally?

What are the best cultural methods?

What equipment is needed?

When and to what extent may the cover crop be grazed?

When should it be turned under?

What is its conservation value?

What is its feed value?

What yield increases can be expected as a result of turning under cover crops?

Is the cover crop a reseeder?

Since the difference in the conservation and soil fertility values between first, second, and third choice varieties often is slight, the local cost and availability of seed may be determining factors in selecting a cover crop variety. Palatability and feed value are important to many farmers, but generally these considerations should be of secondary importance.

Farmers should be encouraged to order seed well in advance of planting time so that supplies will be on hand when needed. In some cases still earlier ordering is desirable so that seed growers may be encouraged to harvest more seed. This is true for varieties where seed growers have a choice of harvesting a crop for seed or using it for hay or pasture.

SOME COVER CROP SEEDS IN GOOD SUPPLY

Carry-over supplies of a few varieties of winter cover crop seeds are somewhat larger than in recent years. Supplies on hand June 30, 1952 were as follows:

	<u>Seed Carried Over from 1951 (000 lbs.)</u>	<u>Estimated Seed to Plant an Acre - lbs.</u>	<u>This Seed Will Plant About the Following Acres</u>
Austrian Winter Peas (Common)	220,800	45	4,907,000
Lupine	118,000	75	1,573,000
Common & Willamette Vetch	13,500	35	386,000
Hairy Vetch	7,500	25	300,000
Common Ryegrass	5,000	25	200,000
Crimson Clover	6,000	15	400,000

MORE SEED IN PROSPECT FOR NEXT YEAR

Prospects for 1952 winter cover crop seed production as of July 1 are generally more favorable than was the case last year, as shown by the following figures:

	<u>1951</u>		<u>1952</u>	
	<u>Acres Harvested</u>	<u>Production lbs.</u>	<u>Acres Harvested</u>	<u>Production lbs.</u>
Austrian Winter Peas	36,500	34,850,000	44,800	52,864,000*
Lupine	49,200	26,800,000	59,000	52,500,000**
Common & Will. Vetch	26,800	6,220,000	47,000	20,200,000*
Hairy Vetch	236,500	43,600,000	371,000	68,635,000*
Common Ryegrass	94,000	60,700,000	105,000	74,000,000*
Crimson Clover	172,200	27,440,000	170,400	28,310,000**
Roughpeas	49,100	12,200,000	64,500	19,000,000*

* Production figures calculated from preharvest acreage and condition report, BAE, June 27.

** 1952 figures for crimson clover and lupine from June 20 and June 27 reports, BAE.

ENCOURAGING WIDER USE OF COVER CROPS

Agricultural Mobilization Committees can do much to encourage the use of cover crops. State agricultural experiment stations do research necessary to obtain technical information needed for the successful establishment of

cover crops. State agricultural extension services and the various other agricultural agencies have an important part in disseminating information to farmers and in getting cover crops established.

It is recommended that guide sheets be prepared locally for the farmer's use. These sheets can contain information on the necessary cultural steps, the benefits to be derived from planting cover crops, and the assistance available for encouraging the planting of each cover crop. The usual methods of disseminating information through the press, radio, and television can be used. In addition, the cooperation of community groups, banks, seed dealers, and other trade sources should be obtained.

SOURCES OF INFORMATION

In practically every county there are local agricultural technicians who have knowledge and experience in the use of cover crops. Full use of these sources of information is suggested as well as the information available in locally adapted publications. Films, including "Save the Soil" which is available in either 16 mm. or 35 mm. sound on one reel (11 minutes), and slidefilms, may be obtained by writing to State film libraries, usually located at land-grant colleges.